

PTO/SB/08A/B (09-06)
Approved for use through 03/31/2007. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Reduction Act of 1995, no persons are required to respond to a coffection of information unless it contains a valid OMB control number.

Complete if Known Substitute for form 1449/PTO Application Number 10/033,571-Conf. #9714 INFORMATION DISCLOSURE Filing Date December 27, 2001 STATEMENT BY APPLICANT First Named Inventor Shuyuan Zhang Art Unit 1648 (Use as many sheets as necessary) Examiner Name M. Mosher 29853/37702 Sheet of 1 Attorney Docket Number

	U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
/BB/		US-5,173,418	12-22-1992	Molin et al.		

FOREIGN PATENT DOCUMENTS							
Examiner	Cite	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines,		
Initials*	No.1	Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear		
	· · · · · ·	:					

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. * Applicant's unique citation designation number (optional). * See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. * Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). * For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. * Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. * Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS					
Examiner: Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

			_
Examiner		Date	- 1
Signature	/Benjamin Blumel/	Considered U1/22/2008	

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.



Used in Lieu of PTO/SB/08A/B (Based on PTO 10-07 version)

Complete if Known Substitute for form 1449/PTO 10/033,571-Conf. #9714 Application Number INFORMATION DISCLOSURE December 27, 2001 Filing Date STATEMENT BY APPLICANT First Named Inventor Shuyuan Zhang 1648 Art Unit (Use as many sheets as necessary) B. P. Blumel Examiner Name 29853/37702 Sheet 1 Attorney Docket Number

U.S. PATENT DOCUMENTS						
Examiner	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where	
Initials* No.1		Number-Kind Code ² (if known)	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear	
/BB/	A28	US-2004/0106184	06-03-2004	Senesac		
	A29	US-2004/0229335	11-18-2004	Zhang et al.		
	A30	US-2005/0158283	07-21-2005	Zhang et al.		
	A31	US-4,222,743	09-16-1980	Wang et al.		
	A32	US-5,221,958	06-22-1993	Bohnenkamp et al.		
	A33	US-5,323,008	06-21-1994	Studholme et al.		
	A34	US-5,604,096	02-18-1997	Schaeffer et al.		
	A35	US-5,623,932	04-29-1997	Ramanujam et al.		
	A36	US-5,631,169	05-20-1997	Lakowicz et al.		
	A37	US-5,665,546	09-09-1997	Cubbage et al.		
	A38	US-5,741,648	04-21-1998	Hemstreet et al.		
	A39	US-5,830,666	11-03-1998	Fujita et al.		
	A40	US-6,265,151	07-24-2001	Canter et al.		
	A41	US-6,410,010	06-25-2002	Zhang et al.		
	A42	US-6,726,907	04-27-2004	Zhang et al.		
	A43	US-6,740,320	05-25-2004	Zhang et al.		
/BB/	A44	US-6,905,862	06-14-2005	Blanche et al.		

		FOREI	GN PATENT	DOCUMENTS		
Examiner	Cite	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages	70
Initials*	No.1	Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	MM-DD-YYYY	Applicant of Cited Document	Or Relevant Figures Appear	
/BB/ B18		WO-1990/08444	07-26-1990	Telefunken Fernseh Und Rundfunk GMBH		
	B19	WO-1991/09310	06-27-1991	Lidak Pharmaceuticals		
	B20	WO-1994/26934	11-24-1994	Baxter Diagnostics Inc.		
	B21	WO-1999/46047	09-16-1999	Large Scale Proteomics Corporation		
	B22	WO-1999/54348	10-28-1999	Clontech Laboratories, Inc.		
	B23	WO-1999/60371	11-25-1999	Geron Corporation		
/BB/	B24	WO-2000/08444	02-17-2000	Imperial Cancer Research Technology Limited		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²		
/BB/	C117	Air Force Print News, New Adenovirus Vaccine "Top Priority", website, printed on October 27, 2004, hhtp://www.af.mil/news/story_print.asp?storyID=123008879, 7 October 2004			

 Examiner 	/Daniamin Diumal/	Date	04/00/0000
	/Beniamin Biumei/	0	l 01/22/2008 · I
Signature	r = origination = rainten	Considered	0 1/22/2000
1010500			· · · · · · · · · · · · · · · · · · ·

Complete if Known Substitute for form 1449/PTO 10/033,571-Conf. #9714 Application Number **INFORMATION DISCLOSURE** December 27, 2001 Filing Date STATEMENT BY APPLICANT First Named Inventor Shuyuan Zhang Art Unit 1648 (Use as many sheets as necessary) B. P. Blumel Examiner Name 29853/37702 Sheet 2 4 Attorney Docket Number

/BB	.	BRAMBLE, Fluorescence spectroscopy as an aid to imaging latent fingermarks in the ultraviolet, Forensic Sci., 41:1038-1041, 1996.	L
	C119	BROCK et al., Rapid characterization of green fluorescent protein fusion proteins on the molecular and cellular level by fluorescence correlation microscopy, PNAS USA, 96:10123-10128, 1999.	
	C120	Centers for Disease Control and Prevention, Adenoviruses, website, printed on October 27, 2004, www.cdc.gov/ncidod/dvrd/revb/respiratory/eadfeat.htm.	
	C121	CHAPEAUROUGE et al., Folding intermediates of a model three-helix bundle protein, J. Biol. Chem., 276:14861-14866, 2001.	
	C122	DENIZ et al., Single-pair fluorescence resonance energy transfer on freely diffusing molecules: observation of forster distance dependence and subpopulations, PNAS USA, 96:3670-3675, 1999.	
	C123	DENK et al., Two-photon laser scanning fluorescence microscopy, Science, 248:73-76, 1990.	Ī
	C124	DEONARAIN, Ligand-targeted receptor-mediated vectors for gene delivery, Exp. Opin. Ther. Pat., 8:53-69, 1998.	_
	C125	DICKSON et al., On/off blinking and switching behaviour of single molecules of green fluorescent protein, Nature, 388:355-358, 1997.	
	C126	ECK et al., Goodman & Gilman's The Pharmacological Basis of Therapeutics, 9 th edition, McGraw-Hill, New York, NY, 77-101, 1996.	
	C127	EGGELING et al., Monitoring conformational dynamics of a single molecule by selective fluorescence spectroscopy, PNAS USA, 95:1556-1561, 1998.	
	C128	HA et al., Single-molecule fluorescence spectroscopy of enzyme conformational dynamics and cleavage mechanism, PNAS USA, 96:893-898, 1999.	
	C129	HAUPTS et al., Dynamics of fluorescence fluctuations in green fluorescent protein observed by fluorescence correlation spectroscopy, PNAS USA, 95:13573-13578, 1998.	•
	C130	KEAY et al., Autoclavable low cost serum-free cell culture media: the growth of established cell lines and production of Viruses, Biotechnol. Bioeng., 18:363-382, 1976.	_
	C131	KOLTERMANN et al., Rapid assay processing by integration of dual-color fluorescence cross-correlation spectroscopy: high throughput screening for enzyme activity, PNAS USA, 95:1421-1426, 1998.	
	C132	KOTANI, Serum-free production of adenoviral vectors for gene therapy, Williamsburg BioProcessing Conference, November 18-21, 1996.	-
	C133	KOZAK et al., Transmissible spongiform encephalopathies (TSE): minimizing the risk of transmission of biological/biopharmaceutical products: an industry perspective, Dev. Biol. Standard., 88:257-264, 1996.	
	C134	LIPPITZ et al., Two-photon excitation microscopy of tryptophan-containing proteins," PNAS USA, 99:2772-2777, 2002.	
	C135	LU et al., Single-molecule enzymatic dynamics, Science, 282:1877-1882, 1998.	Ī
	C136	MAITI et al., Measuring serotonin distribution in live cells with three-photon excitation, Science, 275:530-532, 1997.	
	C137	METS et al., Submillisecond detection of single rhodamine molecules in water, J. Fluoresc., 4:259-264, 1994.	
	C138	NEUHAUSER et al., Correlation between fluorescence intermittency and spectral diffusion in single semiconductor quantum dots, Phys. Rev. Lett., 85:3301-3304, 2000.	
/BB/	C139	NGUYEN et al., Detection of single molecules of phycoerythrin in hydrodynamically focused flows by laser-induced fluorescence, Anal. Chem., 59:2158-2161, 1987.	
<u> </u>	C140	NOBORI et al., Deletions fo the cyclin-dependent kinase-4 inhibitor gene in multiple human	_
3/	0444	cancers, Nature, 368:753-756, 1994.	_
/BB/	C141	NOVAGEN et al., Sample preparation tools for protein research, 2 nd edition, 54-110, 2006.	=
xamine	. 1	/Benjamin Blumel/ Date 01/22/2008	

Sut	estitute for form 1449/PTO	•		Complete if Known		
				Application Number	10/033,571-Conf. #9714	
11	NFORMATIOI	N DI	SCLOSURE	Filing Date	December 27, 2001	
l s	TATEMENT	BY /	APPLICANT	First Named Inventor	Shuyuan Zhang	
				Art Unit	1648	
	(Use as many sheets as necessary)			Examiner Name	B. P. Blumel	
Sheet	3.	of	4	Attorney Docket Number	29853/37702	

/BB/	C142	Office Action, U.S. Application Serial No. 08/975519, United States Patent and Trademark Office, mailed 24 June 1999.	
	C143	Office Action, U.S. Application Serial No. 08/975519, United States Patent and Trademark Office, mailed 25 September 1998.	
	C144	Office Action, U.S. Application Serial No. 09/203,078, United States Patent and Trademark Office, mailed 20 March 2001.	
	C145	Office Action, U.S. Application Serial No. 09/203,078, United States Patent and Trademark Office, mailed 13 September 2001.	
	C146	Office Action, U.S. Application Serial No. 09/203,078, United States Patent and Trademark Office, mailed 3 October 2003.	
	C147	Office Action, U.S. Application Serial No. 09/203,078, United States Patent and Trademark Office, mailed 17 November 2004.	
	C148	Office Action, U.S. Application Serial No. 09/556,570, United States Patent and Trademark Office, mailed 24 February 2003.	
	C149	Office Action, U.S. Application Serial No. 09/556,570, United States Patent and Trademark Office, mailed 23 April 2002.	
	C150	Office Action, U.S. Application Serial No. 09/556,570, United States Patent and Trademark Office, mailed 29 June 2001.	
	C151	Office Action, U.S. Application Serial No. 10/033,491, United States Patent and Trademark Office, mailed 23 August 2007.	
	C152	Office Action, U.S. Application Serial No. 10/033,491, United States Patent and Trademark Office, mailed 1 July 2004.	
	C153	Office Action, U.S. Application Serial No. 10/033,491, United States Patent and Trademark Office, mailed 6 October 2004.	
	C154	Office Action, U.S. Application Serial No. 10/033,491, United States Patent and Trademark Office, mailed 13 July 2005.	
	C155	Office Action, U.S. Application Serial No. 10/033,491, United States Patent and Trademark Office, mailed 16 December 2005.	
	C156	Office Action, U.S. Application Serial No. 10/033,491, United States Patent and Trademark Office, mailed 18 May 2006.	
	C157	Office Action, U.S. Application Serial No. 10/033,491, United States Patent and Trademark Office, mailed 8 August 2006.	
	C158	Office Action, U.S. Application Serial No. 10/909,066, United States Patent and Trademark Office, mailed 6 September 2007.	
	C159	Office Action, U.S. Application Serial No. 10/909,066, United States Patent and Trademark Office, mailed 10 July 2006.	
	C160	Office Action, U.S. Application Serial No. 10/909,066, United States Patent and Trademark Office, mailed 18 December 2006.	
/BB/	C161	PECK et al., Single-molecule fluorescence detection: autocorrelation criterion and experimental realization with phycoerythrin," PNAS USA, 86:4087-4091, 1989.	

Examiner Signature	/Benjamin Blumel/	Date Considered	01/22/2008
1019588			

1019588

Sub	Substitute for form 1449/PTO			Complete if Known		
				Application Number	10/033,571-Conf. #9714	
11	IFORMATIO	N DI	SCLOSURE	Filing Date	December 27, 2001	
S	TATEMENT	BY A	APPLICANT	First Named Inventor	Shuyuan Zhang	
				Art Unit	1648	
	(Use as many s	heets as	necessary)	Examiner Name	B. P. Blumel	
Sheet	Sheet 4 of 4		Attorney Docket Number	29853/37702		

/BB/ C16		PELTEKIAN et al., Adenovirus-mediated gene transfer to the brain: methodological assessment," J. Neurosci. Meth., 71:77-84, 1997.	
		RESHETNYAK et al., Decomposition of protein tryptophan fluorescence spectra into log- normal components, Biophysical J., 81:1710-1734, 2001.	
	C164	ROWE et al., Complementation of adenovirus type 5 host range mutants by adenovirus type 12 in coinfected HeLa and BHK-21 cells, J. Virol., 38:191-197, 1994.	
	C165	SASTRY et al., Evaluation of plasmid DNA Removal from lentiviral vectors by benzonase treatment," Hum. Gene Ther., 15:221-226, 2000.	
	C166	SCHWILLE et al., Molecular dynamics in living cells observed by fluorescence correlation spectroscopy with one-and two-photon excitation," Biophy. J., 77:2251-2265, 1999.	
	C167	SONNLEITNER et al., Imaging individual molecules by two-photon exciation," Chem. Phys. Lett., 300:221-226, 1999.	
	C168	TANAKA et al., Simple fluorescent enzyme immunoassay for detection and quantification of hepatitis C viremia, J. Hepatol., 23: 742-745, 1995.	
	C169	VERMA et al., Gene therapy - promises, problems and prospects, Nature, 389:239-242, 1997.	
	C170	WENNMALM et al., Conformational fluctuations in single DNA molecules, PNAS USA, 94:10641-10646, 1997.	
	C171	WENNMALM et al., UV-fluorescence correlation spectroscopy of 2-aminopurine, Biol. Chem., 382:393-397, 2001.	
	C172	WILLS et al., Development and characterization of recombinant adenoviruses encoding human p53 for gene therapy of cancer, Hum. Gene Ther., 5:1079-1088, 1994.	
/BB/	C173	YU et al., Unmasking electronic energy transfer of conjugated polymers of suppression of 0₂ quenching, Science, 289:1327-1330, 2000.	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner Signature	/Beniamin Blumel/	Date	01/22/2008
Signature	/Benjamin blumei/	Considered	01/22/2000

^{&#}x27;Applicant's unique citation designation number (optional). ³Applicant is to place a check mark here if English language Translation is attached.

Sut	ostitute for form 1449/PTO			Complete if Known		
				Application Number	10/033,571-Conf. #9714	
ll.	NFORMATION	1 DI	SCLOSURE	Filing Date	December 27, 2001	
l s	TATEMENT I	BY A	APPLICANT	First Named Inventor	Shuyuan Zhang	
				Art Unit	1648	
	(Use as many sh	eets a	s necessary)	Examiner Name	B. P. Blumel	
Sheet 1 of 1		Attorney Docket Number	29853/37702			

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant	
	No.	Number-Kind Code ⁴ (if known)			Figures Appear	
/BB/	A45	5,219,752	06-15-1993	Takazawa Yoshiharu et al.		

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ³ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear		

Examiner	Date	T
	. Date	
Signature	Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS		
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²	
/BB/	C174	Communication pursuant to Article 96(2) EPC, EP 06012869.1, European Patent Office, 15 June 2007.		
	C175	Communication pursuant to Article 96(2) EPC, EP 06025694.8, European Patent Office, 14 June 2007.		
	· · · · · · · · · · · · · · · · · · ·	GREEN et al., Biochemical studies on adenovirus multiplication: kinetics of nucleic acid and protein synthesis in suspension cultures, Virology, 13:169-176, 1961.		
	C177	GRIFFITHS, Scaling up of animal cell cultures, Animal Cell Cultures: A Practical Approach, 2 nd edition, edited by Freshney, 3:47-93, 1992.		
	weakly adherent human embryonic kidney cells using a polyurethane-foam packed-be	KAWAKUBO et al., Tissue plasminogen activator (t-PA) production by a high density culture of weakly adherent human embryonic kidney cells using a polyurethane-foam packed-bed culture system, Appl. Microbiol. Biotechnol., 41:413-418, 1994.		
	C179	MANN et al., 3 rd General Meeting of ESACT, Oxford, Develop. Biol. Standard, 46:289-294, 1980.	1	
	C180	Notice of Opposition to a European Patent, EP 0968284, European Patent Office, 12 September 2007.		
		WANG et al., Studies on high-density cultivation of Vero cells with biosilon solid microcarrier, Chinese J. Biotechnol., 12:119-129, 1996.		

Examiner Signature	/Benjamin Blumel/	Date Considered	01/22/2008
Signature		Considered	•

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached.